



Safety and Health Managers Meeting

MSFC Safety



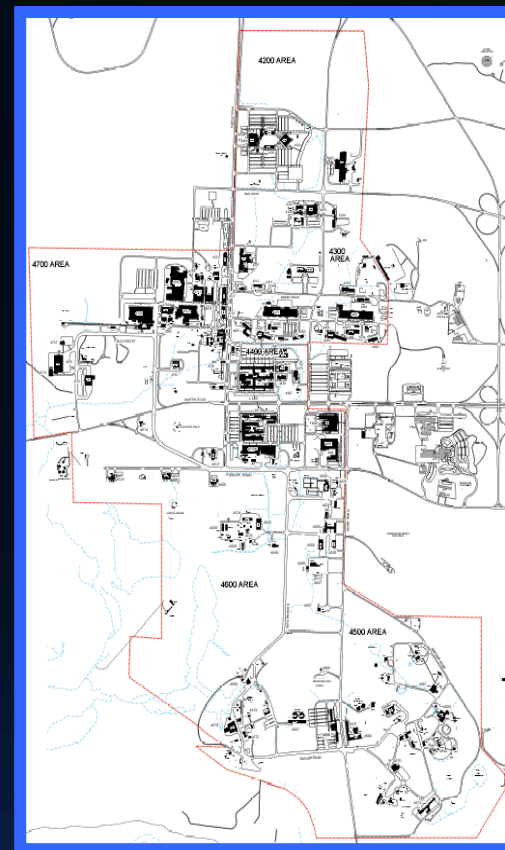
New Shipping & Receiving Building *



New Engineering Building



New Child Care Building



Site Map

Kristie French
George C. Marshall Space Flight Center
February 2006



Shipping And Receiving Building



- Brighter
- More Convenient to Management
- Nearer to Model Shop



- Electric Ramps and Doors
- Locking Mechanism with Signal Light

[BACK](#)



Agenda

- MSFC Reorganization
- S&MA Organization
- Things We are Doing in Industrial Safety
- The Stats



Jim Billbro
Bob Sackheim
Craig Seabrook
Sheila Cloud

Executive Staff

MSFC Center Director/DA01
Deputy Center Director/DD01
Associate Center Director/DE01

Dave King
Charles Chitwood
Robin Henderson

Assistant Director for Safety & Engineering

Paul Munafo

RS01

PS01

LS01

IS01

HS01

OS01

CS01

AS01

**Office of the
Chief
Financial
Officer**

Susan Foster

**Office of
Procurement**

Steve Beale

**Office of the
Chief Counsel**

Bill Hicks

**Office of the
Chief
Information
Officer**

Jim Ellis

**Office of
Human
Capital**

Tereasa Washington

**Office of
Equal
Opportunity**

Audrey Robinson

**Office of
Strategic
Analysis &
Communications**

Rose Allen, Acting

**Office of
Center
Operations**

Jim Carter

VP01

**Science & Mission
Systems
Office**

Charles Chitwood, Acting

JP01

**Exploration Launch
Office**

Steve Cook

MP01

**Shuttle
Propulsion
Office**

Robert Lightfoot

ED01

**Engineering
Directorate**

Mike Rudolphi

ED04

**Chief Engineers
Office**

QD01

**Safety & Mission
Assurance
Directorate**

Roy Malone, Acting

EI01

**Instrument &
Payload Systems
Development
Department**

Steve Pearson

EV01

**Spacecraft &
Vehicle
Systems
Department**

Jack Bullman

ER01

**Propulsion
Systems
Department**

Preston Jones

EM01

**Materials &
Processes
Laboratory**

Ralph Carruth

EO01

**Mission
Operations
Laboratory**

Ann McNair

ET01

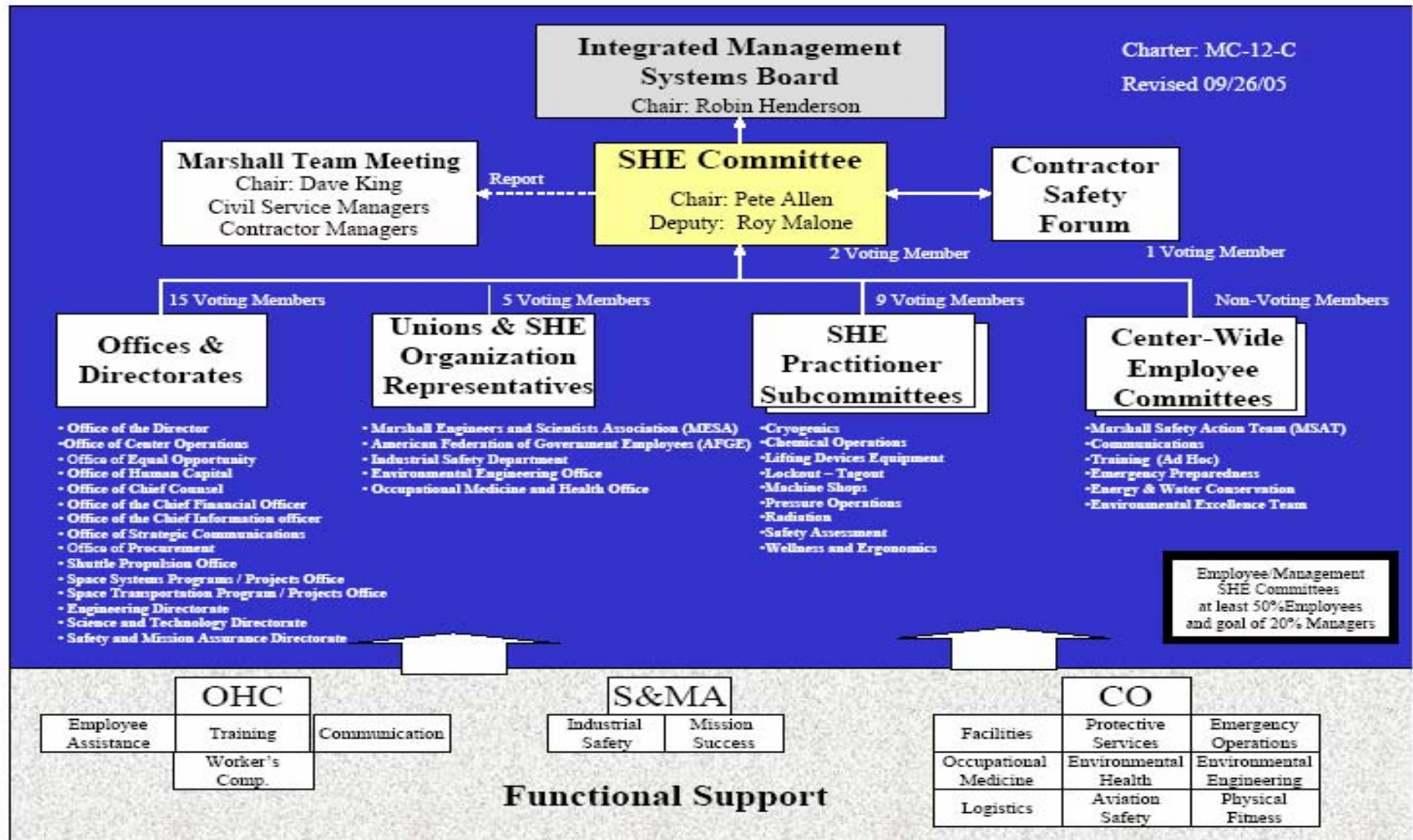
**Test
Laboratory**

Pete Rodriguez





SHE Organization





Things We Are Doing



QD50 Products and Services

- **Assure a Safe Working Environment through compliance with OSHA, NASA , and Industry Safety Requirements**
- **Facility and Test Hardware Hazard Analysis**
- **Hazardous Operations Surveillance**
- **Mishap Investigation and Data Analysis (Including IRIS)**
- **Center-Wide Policy/Procedures Inputs & Reviews**
- **Safety Compliance Audits**
- **Safety Training and Awareness**
- **Drawing and Procedure Reviews**
- **Technical Consultation**
- **Construction Inspection and Monitoring**
- **Review of Contractor Safety and Health Plans**
- **Support for Source Evaluation Boards**
- **Program Safety Reviews (ORI's, SRR, PDR, CRD, FRR, SRT's, TRR's and Transportation Readiness Reviews)**
- **Explosive Siting Problems**
- **Supporting Critical and Program Critical Hardware Lifts**
- **Safety Certifications**
- **Data Base Development/Management, such as:**
 - **Inventory of Hazardous Operations (IHOPS)**
 - **SHE Findings Tracking System (SHEtrack)**
 - **Safety Concern Reporting System (SCRS)**
 - **Supervisor Safety Web Page (SSWP)**



Safety Database Administration and Management

Special or Significant Activities

- ◆ MSFC “SHE Training Assessment” - Tailored Questionnaire, On-line course description, new course development
- ◆ Upgrades to SSWP – integrate with existing databases, Improve Metrics Capture
- ◆ RiskSafe 7 – Contractor Training and IT Support
- ◆ SHE Reporting Streamlined

Day-to-Day Activities

- ◆ Safety Concern Reporting System (SCRS)
- ◆ SHE Inspection Findings Tracking System (SHEtrak)
- ◆ Supervisor Safety Web Page (SSWP)
- ◆ Inventory of Hazardous Operations (IHOPS)
- ◆ Certification Tracking System (Certrak)
- ◆ Support Contractor Database
- ◆ Incident Reporting Information System (IRIS)
- ◆ SHE Committee CAITS
- ◆ Employee Question Answering System (Dr. Know)

Question	Yes	No
Is the employee a new hire to MSFC (permanent or temporary, civil service or contractor), or working through an academic, internship, or joint agreement – effective within the past 12 months?	Yes <input type="radio"/>	No <input type="radio"/>
Does the employee work within the physical boundaries of the Marshall Space Flight Center or at one of the MSFC off-site locations such as NSSTC or Intergraph?	Yes <input type="radio"/>	No <input type="radio"/>
Does the employee have supervisory or managerial responsibility for MSFC workers? <ul style="list-style-type: none">Managers and supervisors are required to audit (attend without completing examination or certification activities) all training courses required for personnel they supervise.	Yes <input type="radio"/>	No <input type="radio"/>
Will the employee be required to integrate human factors/ergonomics into system design and development?	Yes <input type="radio"/>	No <input type="radio"/>
Does the employee procure materials in any of the following product categories: paper, non-paper office; construction; landscaping; park and recreation; transportation; and/or vehicular?	Yes <input type="radio"/>	No <input type="radio"/>



Online SHE Training Classes

- ❖ **On-line Class Library has Over 220 SHE Related Classes On-Line**
- ❖ **New SHE Classes have been developed and added to the SOLAR Library**
 - Safety, Health and Environmental
 - Power Point Charts with Test
 - Records kept of completion
- ❖ **Classes are Available for All Team Members**
 - Civil Service
 - Contractors

(SOLAR/SATURN)



Supervisor Safety Web Page

- Quick, easy web-based recordkeeping for safety meetings and walk-throughs (Civil Service and Contractors)
- Instant graphic metrics by organization with drill down capability to sub-organizations
- Supporting information (i.e. Presentation charts, inspection checklist, personnel listings, etc.)
- New – Built-in Finding and Action tracking system with automatic work order generation or e-mail notification, improved attendance tracking, SHEcaits

Supervisors Safety Web Page

King, DA01

SSWP - Supervisor Menu Reminder - you leave "0" open findings in your database

- **Safety Meeting**
 - Plan A Safety Meeting
 - Add Safety Meeting (includes adding Actions)
 - Edit Safety Meeting (includes editing Actions)
 - Edit Actions
 - View/Print/Delete Safety Meeting And Associated Actions
- **Safety Visits**
 - Printable Checklists
 - Printable Supervisor Safety Inspection Checklist
 - Printable Safety Compliance Checklist (Specific)
 - Add Safety Visit (includes adding Findings)
 - Edit Safety Visit (includes editing Findings)
 - Edit Findings
 - View/Print/Delete Safety Visit And Associated Findings
- **SHE Checklists**
 - She Program Checklist
 - Office and Non-Hazardous Area Checklist
 - Inventory of Hazardous Operations (IHOPS)
 - Supervisor's SHE Training Guide
- **Listings**
 - View All Open Actions
 - View All Open Findings
 - Findings Report
 - View Actions and Findings by Individual
 - View Findings By Sub Organization

Supervisors Safety Web Page

King, DA01

Percentage of Required Meetings Completed for DA01 in February 2005

Required Meetings Completed for DA01 in February 2005

Click on a highlighted bar or an orgcode to drill down.

Org	Percent Req'd Meetings	Req'd Meetings	Hold
DA01	0.0%	1	0
DA02	87.2%	39	34
DA03	80.0%	7	4
DA04	79.0%	142	113
DA05	100.0%	11	11
DA06	95.4%	68	45
DA07	100.0%	1	1
DA08	100.0%	11	11
DA09	20.0%	15	3
DA10	100.0%	1	1
DA11	87.2%	8	7
DA12	90.2%	21	19
DA13	100.0%	9	9
DA14	83.3%	54	45
DA15	94.4%	18	17
Total	84.2%	454	340

Menu Menu Date Select Org Select

Dashboard Contractors NASA

Log Out Login Menu

MITC Safety Reporting System | NASA Web Privacy Statement



New Hazard Assessment Software

RiskSafe 7 (www.dyadem.com)

- Improve quality and consistency of the hazard identification and control process for both Industrial and Flight Safety
- Improve maintenance and recordkeeping of “live” hazard analysis documents
- Provide a common place to build a vast knowledge base of risk experience for future use
- Improve efficiency in performing labor intensive hazard assessments
- New – Later version, Contractor and IT support

The screenshot shows the RiskSafe 7 software interface. The main window displays a table for '1. Lawnmower Maintenance & Operation' with the following data:

Potential Incident/Hazard	Before Risk Reduction			Current Controls
	Ser	Occ	Risk	
1. Shoulder Injury from continually pulling cord until mower starts	Ser	L	M	1. Properly tuned machine
2. Hand makes contact with blade while unclogging the chute to the grass catcher bag	Cat	L	H	1. Sticker on Top of Mower warning of danger
3. Inhalation of Fumes from Motor	Mod	VL	M	1. Use high grade fuel to reduce harmful emiss 2. Properly tuned machine
4. Inhalation of Dust/Debris from air propelled through Grass catcher bag	Mod	VL	M	1. None
5. Hearing Damage - Noise of Mower operation	Ser	VL	H	1. Ear Protection - Headsets
6. Foot slips under Cutting Deck	Cat	L	H	1. Sticker on Top of Mower warning of danger
7. Object is propelled out from under Cutting Deck	Ser	VL	H	1. Remove debris from working area prior to starting

The screenshot shows the 'Project Settings - Hierarchy' dialog box. The 'Hierarchy' tab is selected, showing a tree structure of project settings. The 'Probability Matrix' is highlighted. The 'Matrix' tab is also visible, showing a table for 'Severity of Harm' with the following data:

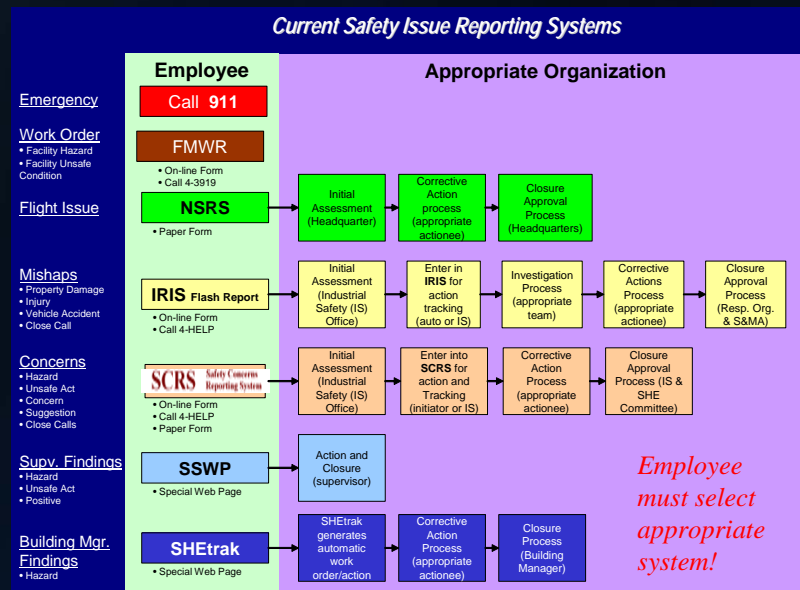
Occurrence of Harm	Severity of Harm			
	Cat	Ser	Mod	Min
VL	H	H	M	L
L	H	M	M	L
U	M	M	L	N
R	M	L	L	N



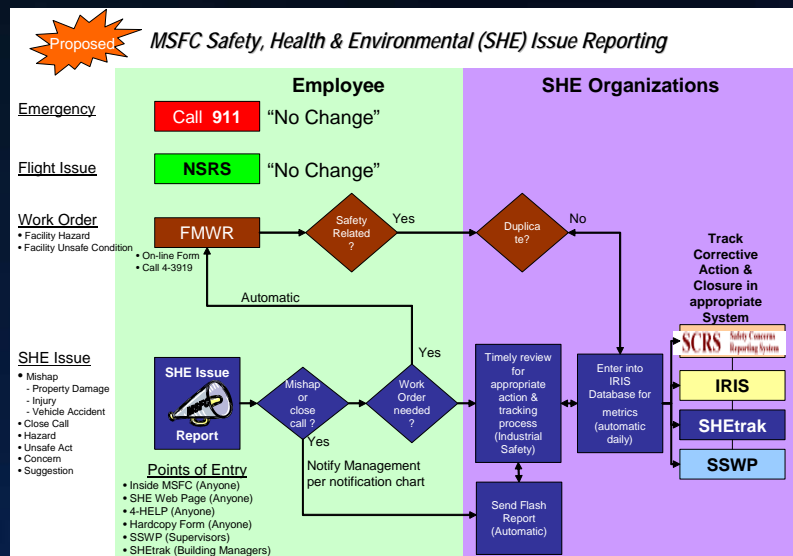
SHE Issue Reporting

- Previous process includes numerous reporting systems
- Caused customer confusion
- Current process is simpler
- One reporting process, we select appropriate tracking system
- New input form expands as needed for type issue being reported

Previous



Current

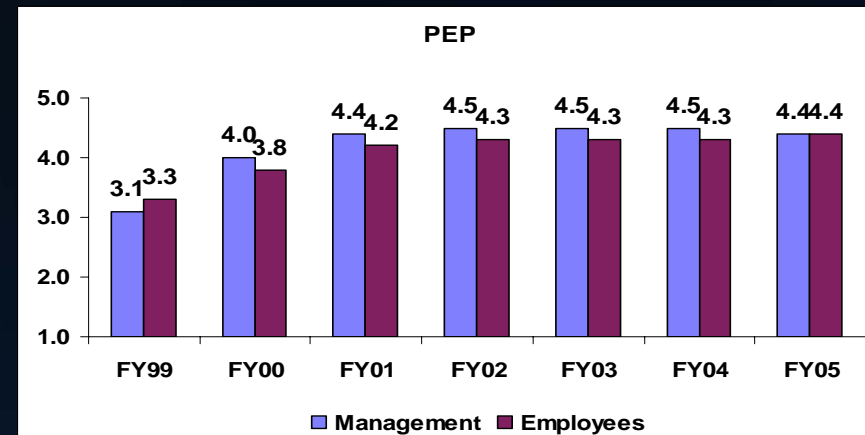
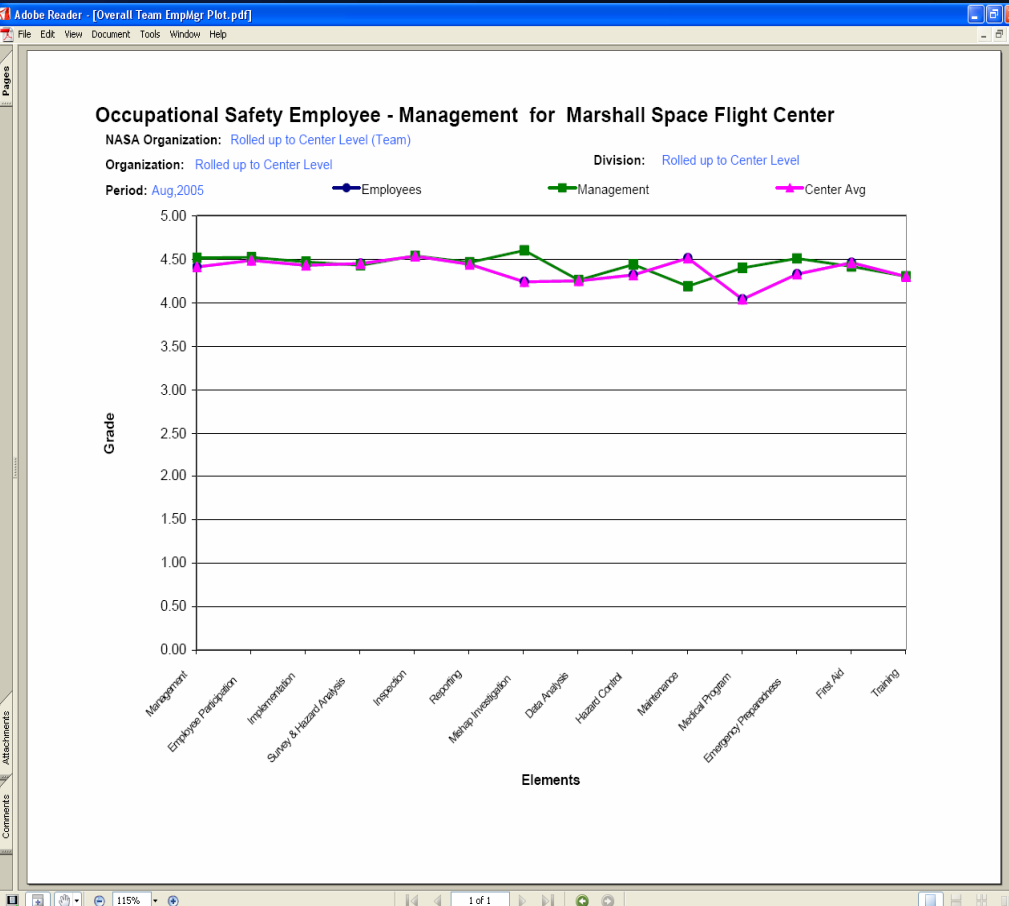




The Stats



PEP Survey Results – MSFC Team*



* Contractors and Civil Service organizations provided specific reports.

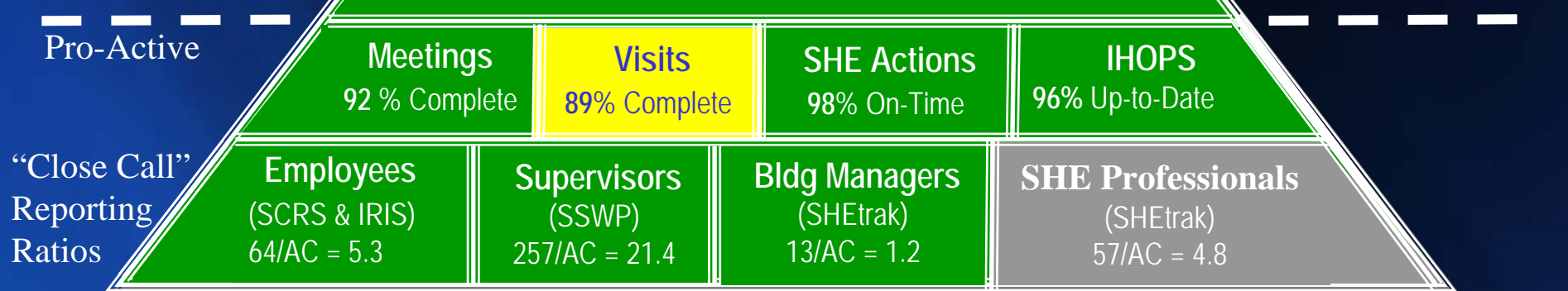


MSFC Team Metric - Personnel Safety

Data for FY06 (As of 01-01-06)

*Estimated

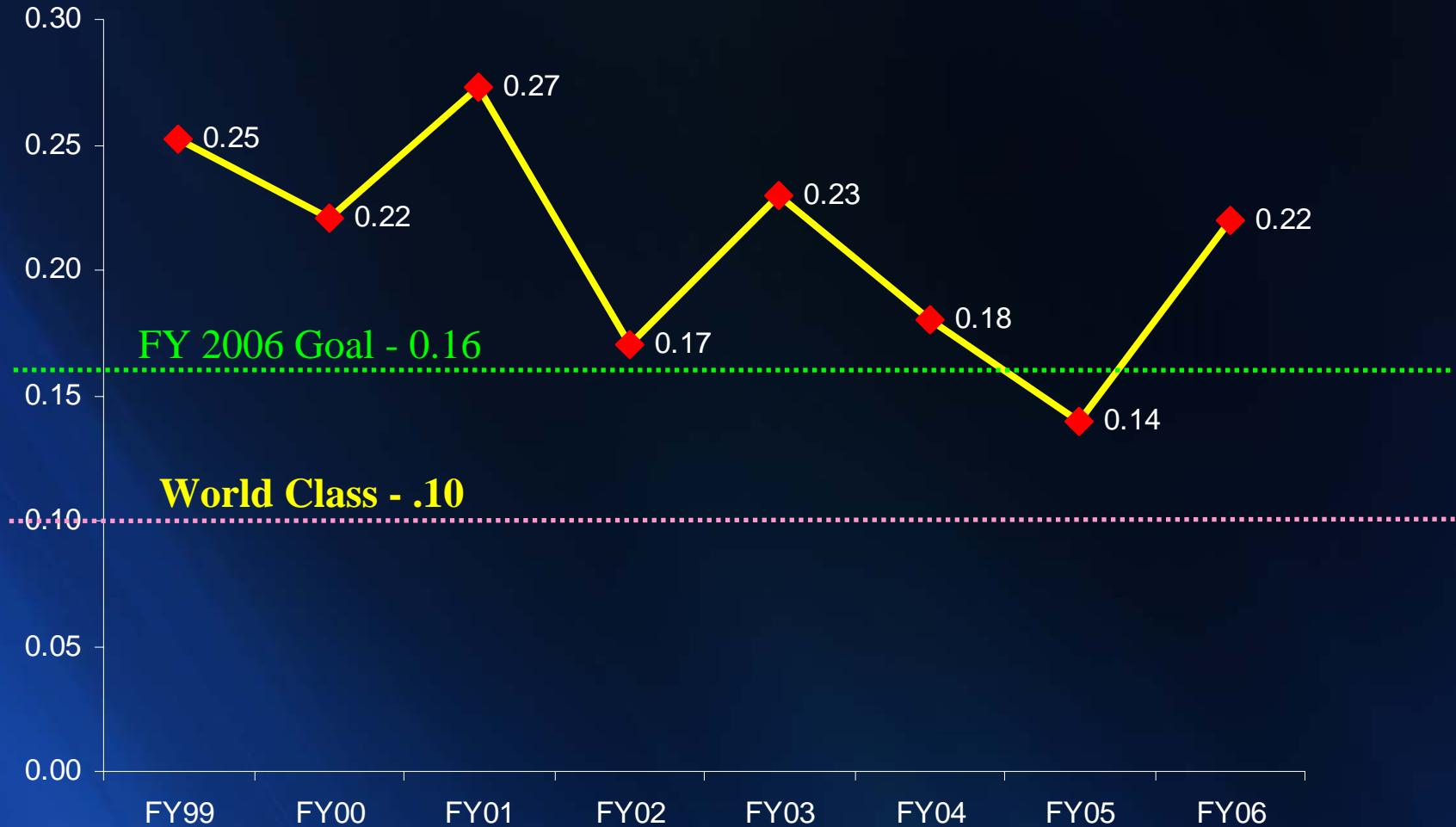
Green – Meeting Goal
Yellow - Caution
Red - WARNING
Grey – Inadequate Data





Team Lost Time Rates FY96 – FY06

(As of 01-01-06)



MSFC Safety *Bulletin*

Hazardous Material Trailer Truck Incident

What Happened Before Emergency Personnel Arrived?

- A fully loaded Liquid Nitrogen truck overturned at Dodd and Martin due to excessive speed.
- Several employees rushed to site.
- Vehicles continued driving by.
- Employees helped free driver from truck cab.



What Could Have Happened?

- Possible asphyxiation if truck had developed sudden catastrophic leak.
- Possible explosion, fire or toxic cloud if truck was loaded with some other hazardous chemical.
- Possible worsened injuries to driver.



What Should Have Happened?

- Assure **911** is called immediately.
- When deciding if you should take action, consider that MSFC emergency response times are normally less than 4 minutes. In most on-site cases, waiting for the professionals will be the best bet.
- Don't place yourself in danger. Assess safety hazards before getting too close to an accident site, especially when potentially hazardous materials may be present. Look for hazardous material placards and signage on damaged vehicle from a safe distance.
- Assess danger to injured personnel before attempting to move them. Only move them if you feel they are in immediate danger or as needed to relieve pain.



The End